

Applicant/Serial No.: Ronald S. Kazdin et al. / 10/676,452
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Examiner/Group: Daniel Previl / 2636
Amendment mailed: 08 / 08 / 2005
Attorney File: GZ4088US (#90696)

REMARKS

This is in response to the non-final Office Action dated February 9, 2005. The drawings have been objected to, certain informalities were identified in claims 1 and 2, and all of the claims were rejected under 35 U.S.C. §103. As explained below, the drawings have been amended, the original claims in the application have been canceled, and new claims have been added.

The drawings were objected to because the wire defining the periphery of the containment area was not shown. In new claims presented herein, the foregoing wire is not positively claimed, and it is not believed that such a wire must necessarily be shown in the drawings. However, Figs. 1 and 2 have been amended by showing a child containment wire extending around module 12 shown in Figs. 1, 2, and a new Fig. 7 has been added to the application with an added description discussing the wire and the electronic apparatus of which it is a part (as no new matter has been added). Preliminary drawings for approval by the Examiner are enclosed, and formal drawings will be prepared once the enclosed drawings have been approved by the Examiner. It is requested that the objection to the drawings be withdrawn.

Claims 1-7 and 10-16 have been rejected as being unpatentable over Osborne et al. (U.S. 6,665,241) in view of Law (U.S. 5,812,056). According to the Office Action, Osborne et al. discloses a child containment, communication and locating system having a wire, described in Osborne et al. as a perimeter antenna loop 8, defining the periphery of a pet containment area, at least one child-monitoring module, described in Osborne et al. as transmitters 12, 18, 20 and 22, to be worn by the monitored individuals within the area surrounded by the perimeter of the antenna –

where at least one child-monitoring module includes means for receiving the signal applied to the wire defining the pet containment area. However, it is respectfully submitted that Osborne et al. discloses a different type of system from that described in the application.

In Osborne et al. it is the transmitters in the child modules continuously that transmit the signal and not the perimeter antenna loop 8. Referring to column 2, lines 35-38, the following statement is made: "The perimeter loop 8 is an RF receiving antenna, which receives all RF signals transmitted from the transmitters 12, 18, 20, 22." Column 2, line 55, through column 3, line 3, goes on to recite:

The perimeter loop 8 receives a periodically-transmitted individually-identifiable low frequency RF signal from each of the transmitters 12, 18, 20, 22 and forwards these signals to the receiver 2. The receiver 2 will receive no signals (or weaker signals) transmitted by a transmitter from the exterior area 6 because the magnetic field of the transmitters within the perimeter loop 8 will induce voltage in the perimeter loop 8 that will cause the current to flow in the loop in a direction tending to set up an opposing magnetic field. The induced voltage in the perimeter loop 8 is reduced if the transmitter is outside the perimeter loop 8, such as transmitter 22.

The Office Action further states that Law discloses a control unit (microprocessor 30) (Fig. 1, ref. 30) including a transceiver device (child transceiver 100) (Fig. 1; col. 5, lines 45-65). Law was cited because it discloses a control unit. However, in Law, as in Osborne et al., the child module (child unit) emits signals for reception by a guardian unit. As explained in Law at column 4, lines 3-6:

After a child/guardian unit pair is initially configured, the child unit continuously transmits to the guardian unit – the guardian unit being configured to detect when such transmissions do not occur.

In the present invention as defined in new claims 17-33 and 35-39, the wire defining the periphery of the child containment area emits electronic signals defining the periphery of the pet containment area. The wire detector detects such signals. Referring to new independent claims 17,

31, 33 and 35, these claims recite that the inventive child monitoring, communication and locating system is for use with an electronic containment system having a wire defining a periphery of a containment area. An electronic signal is applied to the wire and the wire emits a radio frequency signal in response to the electronic signal. Claim 17 further recites:

a wire detector for detecting radio frequency signals from the wire defining a periphery of a containment area and for generating a first wire detection signal in response to the detection of a wire.

Independent claims 31, 33 and 35 have similar recitations in this respect.

The wire detection system of the present invention operates on a better principle than does Osborne et al. Whereas the reference uses a relatively high amount of energy since Osborne et al. requires each child monitoring module to continuously transmit signals, the child monitor of the present invention only generates a signal when the module is within a predetermined distance from the wire. The wire itself has the low voltage electrical power for generating the RF signal.

Therefore, it is respectfully submitted that claim 17, and the claims dependent therefrom, and claims 31, 33 and 35 differ in this fundamental way from Osborne et al. and Law. It is therefore submitted that claims 17, 31, 33 and 35 are in allowable form. Claims 18-30 depend from claim 17, and it is requested that they be allowed as well since they include all of the limitations of the parent claim. Claim 32 depending from claim 31 and claims 36-39 depending from claim 35 should likewise be allowed as well.

Claim 34 defines a combination not known or suggested in the prior art cited in the present application. Claim 34 defines a child monitoring, communication and locating system comprising a control unit and a child module having a child module microcontroller and a child module transceiver. The foregoing system further includes a motion detector system, an audio communication system, a directional and distance locating system, and a monitoring system. The

motion detector would be used to determine if a child was immobile or stationary because some harm was done to the child, to determine if someone had abducted the child and discarded the child module, to determine if the child had taken the child module off accidentally or deliberately, or if the child were sleeping or sitting still for some reason. The audio communication system is for the child and a person at the control unit, such as a parent, babysitter or other guardian, to talk to each other, such as when an alarm had been generated by the child module. The directional and distance locating system is a system in which the child module generates monitoring signals in all directions, and the person with the control unit would in essence move or sweep the control unit with its directional antenna in a path, such as a circular arc, to detect the strongest signal emitted by the child module. This signal would indicate the direction from which the strongest signal was detected to find out where the child is located, and the strength of the signal would indicate its distance.

The monitoring system is a system under which the child module would generate monitoring signals in all directions, would be detected by the control unit. The control unit could be described as polling the child modules. If any of the monitoring signals falls below a predetermined value or threshold, the control unit sends an alarm. The person at the control unit could then use the directional and distance locating (or tracking) mode to locate the child.

The combination defined in claim 34 is composed of components which are all interrelated and increases the surveillance on a child or children (or other people such as Alzheimer's patients) to protect the child's safety even if not in the line of sight of a guardian. The guardian would be alerted if the child module were not moving for some period of time. The guardian would probably use the audio system to communicate with the child to determine whether or not the child were safe. If the child would not return the guardian's communication, the guardian would activate the directional and distance locating unit to determine the whereabouts of the child module and would search for

the child. If the monitoring system emits an alarm, the guardian would activate the directional and distance locating system and move the control unit so that its antenna would pick up the monitoring signals to determine the location of the child. The guardian would also use the audio system to talk to the child. This provides a better child monitoring, communication and locating system than is taught by the art or available on the market today.

None of the references cited in the present application teaches or suggests this combination. Osborne et al. is limited to a system wherein individuals having transmitters are disposed within a predetermined perimeter surrounded by a loop antenna, and the transmitters emit periodically-transmitted, individually-identifiable, low frequency RF signals. None of the systems set forth in claim 34 are taught or suggested in Osborne et al., wherefore Osborne et al. would not be a proper reference against claim 34.

Law discloses a monitoring and location device wherein a guardian unit and a child unit are in communication on the same radio frequency band. The guardian unit can detect when the child unit goes beyond a preset distance from the guardian unit. Law discloses a directional and distance location device which is more complicated and expensive than that portion of the present disclosure. Law describes a system having a phased array antenna, whose accuracy is jeopardized by reflected signals. There is no suggestion made in Law as to the other three systems defined in claim 34, namely the motion detector system, the audio communication system or the wire detection system. Castellon et al. discloses a multiple object and locating device of the same general type of one of the four systems defined in claim 34 and does not supply the deficiencies of the other references in failing to teach or suggest the other systems defined in claim 34. It is therefore respectfully submitted that neither Law by itself, nor Castellon et al. by itself, nor all three references together can properly support a rejection of claim 34.

Claim 35 is directed to a child monitoring, communication and locating system including a control unit and at least one child module. Each of the control unit and the child module has a microcontroller, and they each have a transceiver for being electronically connectable with the other. The system further includes the combination of a motion detector, a directional and distance locating system, and a wire detection system. Claim 35 should be allowable because the wire detection system recited in claim 35 is patentably distinguishable from the prior art of record as discussed above. Furthermore, Osborne et al. does not disclose the other systems recited in claim 35. Therefore, Osborne et al. would not be a proper reference against claim 36.

As explained earlier, Law neither discloses a motion detector system, an audio communication system, nor a directional and distance locating system as recited in claim 35. Therefore, Law cannot support a rejection of claim 36 alone or with Osborne et al.

Castellon et al. discloses a type of directional and distance locating system but does not disclose or suggest the other systems set forth in claims 31, 34 or 35. It is, accordingly, respectfully submitted that Castellon et al. cannot alone, or together with the other references, support a rejection of claims 34, 35 or any of the other claims in the present application. It is therefore submitted that claims 34 and 35 are in allowable form, as are claims 17-33 and 36-39, over Castellon et al. alone or with any of the other references.

There is full support in the application for each of the new claims. Any changes that have been made in the specification are intended to be consistent with language used in the art and do not constitute new matter.

Referring to the revised (substitute) specification having numbers for identifying the respective paragraphs of the specification, the term in claim 17 "a generator to apply an electronic signal to the wire" can be found in paragraph 0020. Support for the phrase "the system input data"

found in the last paragraph of claim 17 is in paragraph 0021. Referring to the same paragraph and the term "channel," which has been inserted, that term is also found in paragraph 0021 and is a common way to refer to the parts of the input data discussed in the paragraph.

Claims 18 and 37 refer to a radio frequency signal in the wire exceeding a predetermined minimum magnitude. Support for this can be found, for example, in paragraph 0007 where it states that if a child crosses an established boundary and the radio frequency capability of the control unit has been exceeded, etc.

Claim 31 is similar to claim 17 and refers to the generation of first and second wire detection signals depending on whether the child unit is within first or second predetermined distances from the wire defining the periphery of a containment area. It is explained in paragraph 0007 that if a child crosses the wire, an audible alarm associated with the control area changes pitch indicating that the child has passed from one area near the established boundary to another area. The language in claim 33 is similar to that in claim 19, and it is not believed that any further explanation is necessary.

The display panel identified in claim 19 is discussed with respect to display 62 in paragraph 0017.

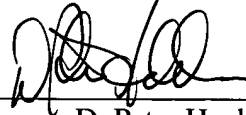
Referring next to the "directional and distance locating radio signal" of claims 21, 34 and 35, this term is used in the last sentence of paragraph 0007. The motion detector of claims 22, 34 and 35 finds support in paragraph 0015. The audio system of claims 23-26 and 34-36 finds support in paragraph 0017.

It is respectfully submitted that the invention as defined in the claims is allowable over the prior art, that the specification fully supports the claims, and that the application be allowed.

A copy of a "Power of Attorney and Revocation of Prior Powers of Attorney with New Correspondence Address" is enclosed.

The Examiner is invited to telephone the undersigned if there are any issues to be discussed which could expedite the prosecution of the present application.

Respectfully submitted,

By:  _____
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DPH/ck

Enc.: Marked and clean substitute specification pages
Preliminary drawings for Examiner's review (Figs. 1, 2 and 7)
Petition and fee for extension of time
Copy of Power of Attorney w/revocation and new correspondence address

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